

IN THE DRAWINGS:

Please enter the attached replacement figures including all figures and incorporating changes to omit the cross hatching previously provided on the O-ring 22 illustrated in FIGS. 1 and 3, as discussed during the July 9, 2008 personal interview.

REMARKS

PERSONAL INTERVIEW

Preliminarily, Applicants thank the Examiner for the personal interview conducted with Applicants' representative, Christine McCarthy, on July 9, 2008. In accordance with the matters discussed during the interview, Applicants submit various amendments and remarks for consideration by the Examiner.

OBJECTIONS AND NON-PRIOR ART REJECTIONS

Based on the objection to the specification, Applicants are submitting the attached Substitute Specification incorporating the unentered changes previously submitted on May 9, 2006. A marked up copy and clean copy of the Substitute Specification are attached.

Likewise, the Figures 1 and 3 are amended to overcome the drawing objection and claims 12-13 are amended to correct typographical errors and overcome their objection. Additionally, independent claim 8 is amended to merely further conform the claim to U.S. practice and dependent claim 12 is rewritten in independent format in anticipation of the withdrawal of the prior art rejection based on Yeoman. No new issues or new matter are submitted by this Amendment, therefore, entry is proper.

PRIOR ART REJECTIONS

Claims 8 and 12-13 remain rejected under 35 U.S.C. 103 as being unpatentable over Yeoman. Claims 8-11 are rejected under 35 U.S.C. 103 as being unpatentable over Klein *et al.* These rejections are respectfully traversed.

Based on the detailed explanation provided by the Examiner during the personal interview, Applicants understand that the Examiner is interpreting the potential ambiguities of both Yeoman and Klein in a broad manner as indicated under KSR International. Therefore, it is the Examiner's position that, where the Examiner has referred to certain points as being "unclear," he is not referring to the pending claims; rather, the Examiner is characterizing the teachings of Yeoman and Klein as unclear (i.e., subject to alternative interpretations).

TRAVERSAL OF REJECTION BASED ON YEOMAN

Therefore, Applicants understand the rejection of claims 8 and 12-13 to be based on the characterization that the teachings of Yeoman are unclear whether the position of the locking element (ring 46) and the engagement section (that region illustrated to the left of the ring 46 in FIG. 1) and the strength of the compression spring (86) are such that in an uncoupled state of coupling, the compression spring (86) pushes the nipple (fitting 12) out of the sleeve (body 10) to such an extent that the engagement section (that region illustrated to the left of the ring 46 in FIG. 1) is outside the sleeve (body 10). Because the Examiner is unsure whether this could occur, the Examiner has relied on KSR International, for the proposition that he must interpret this ambiguity broadly and reject the claims based on that broad interpretation (i.e., that mere material selection would result in the claimed feature).

Based on this understanding, Applicants submit that the teachings of Yeoman cannot be construed to indicate that the spring functions as speculated because:

- (1) the region formed to the left of the ring 46 could not be pushed outside the main body 10 regardless of the force exerted by the spring 86; and
- (2) the region formed to the left of the ring 46 could not be pushed outside the main body 10 while still allowing the automobile coolant flow control apparatus to function as it is disclosed in Yeoman.

(1) REGION FORMED TO LEFT OF RING 46 COULD NOT BE PUSHED OUTSIDE MAIN BODY 10 REGARDLESS OF FORCE EXERTED BY SPRING 86

As illustrated in FIG. 1 of Yeoman, the spring 86 urges the flow control member 14 away from the valve seat 20 and into abutting engagement with the annular retainer 80 (col. 6, lines 20-22). Thus, in operation, the flow control member 14 moves towards and away from the valve seat 20 within the chamber 26 depending on the rate of fluid flow between the inlet passage 20 and the outlet passage 28 (col. 6, lines 13-16). In the illustrated embodiment, the flow control member 14 is captured within the chamber 26 by the annular retaining member 80, which is press fitted into the chamber 26 after the flow control member 14 is installed (col. 6, lines 17-19).

Therefore, as illustrated in FIG. 1 of Yeoman, the force of the spring 86 is confined within the chamber 26 which is defined on the left side of FIG. 1 by the annular retainer 80. Thus, no matter how strong the force provided by the spring 86, no amount of force could push the portion to the left of the ring 46 out of the body 10.

Accordingly, a full and thorough understanding of the teachings of Yeoman indicates that Yeoman does not teach or suggest a configuration wherein a compression spring pushes a nipple out of a sleeve to such an extent that an engagement section is outside the sleeve, as recited in independent claim 8. Therefore, independent claim 8 and its dependent claims are patentable over Yeoman.

(2) REGION FORMED TO LEFT OF RING 46 COULD NOT BE PUSHED OUTSIDE MAIN BODY 10 WHILE STILL ALLOWING AUTOMOBILE COOLANT FLOW CONTROL APPARATUS TO FUNCTION

Furthermore, based on the explanation of the operation of Yeoman's configuration, the automobile coolant flow control apparatus would not function if the spring 86 were to push that region to the left of ring 46 in FIG. 1 out of the body 10. This is because the spring 86 would have to expand beyond the retainer barrier 80 to do so, which would destroy the integrity of the chamber 26. Doing so would result in a non-operational flow control apparatus.

Although, KSR International could be reasonably construed to stand for the proposition that some variations in design may be so obvious as to be mere ordinary innovation and unpatentable, KSR International does not dictate or permit that the design of a prior art apparatus may be dismantled and thereby rendered inoperable to provide a basis for an obviousness rejection.

It is well settled that, if a proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)

Accordingly, based on the full and thorough understanding of the teachings of Yeoman, any potential modification to Yeoman to provide a compression spring that pushes a nipple out of a sleeve to such an extent that an engagement section is outside the sleeve, would render Yeoman's apparatus inoperable. Therefore, independent claim 8 and its dependent claims are patentable over Yeoman.

REJECTION BASED ON KLEIN

As Applicants understand the rejection based on Klein, the rejection is based on an assertion that Klein's spring 21 could have such strength so as to push the juncture 41 of the head 3 out of the portion considered by the Examiner to be the sleeve (body 9 and bushing

35). However, in Klein, the purpose of spring 21 is to keep the seat 15 on the head 3. In the embodiment of FIG. 5, the spring 21 is even removed and the seat 15 is increased in length. As indicated at col. 2, beginning at line 42, the dimension of the spring 21, the bushing 35, the collar 7, ring 33 and the juncture 41 are such that the spring 21 is not under compression until the head 3 is substantially inserted within the recessed 39. Thus, the spring 21 is clearly designed merely to maintain a seal not to push the head 3 out of the body. That seal is to be maintained between the seat 15 and the flat end of the head 3. “[T]he position shown in Fig. 4, wherein the cylindrical seat 15 has been forced rearward to a point where the spring 21 is sufficiently compressed to exert a strong bias on the seat, holding it in lubricant tight engagement with the flat end of the head of the fitting” (col. 2, lines 64-69).

Therefore, one cannot surmise that the small amount of compression shown in FIG. 3 is sufficient to move the juncture 41 exterior through the body 9. The nonlocking connection shown in FIG. 3 is the problem that the present application is addressing. This is not a locked position as shown in FIG. 4.

Accordingly, based on a full and thorough understanding of the teachings of Klein, mere material selection and selection of a forceful spring 21 could not provide a compression spring that pushes a nipple out of a sleeve to such an extent that an engagement section is outside the sleeve in Klein. Therefore, independent claim 8 and its dependent claim are patentable over Klein.

It is respectfully requested that, if necessary to effect a timely response, this paper be considered as a Petition for an Extension of Time sufficient to effect a timely response and shortages in other fees be charged, or any overpayment in fees be credited, to the Barnes & Thornburg LLP Deposit Account No. 02-1010 (967/44780).

Respectfully submitted,
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Date: August 11, 2008